

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) The use

- (i) of an alkaline medium,
- (ii) of a first gel which comprises gelatin and phosphate ions, and
- (iiia) of a second gel which is free of phosphate ions, the first layer of gel being covered with this second gel and/or
- (iiib) of a medium containing calcium ions,

for the production of a composition for the growth of apatite or/and dentine on tooth material.

2. (Original) The use as claimed in claim 1,

characterized in that

the alkaline medium employed is an alkaline solution or an alkaline gel.

3. (Currently Amended) The use as claimed in claim 1 or 2,

characterized in that

the alkaline medium has a pH of 7.1 to 14, in particular of 7.5 to 10, and preferably of 8 to 9.

4. (Currently Amended) The use as claimed in ~~one of the preceding claims~~
claim 1,
characterized in that
the alkaline medium employed is 0.05 to 1N NaOH.
5. (Currently Amended) The use as claimed in ~~one of the preceding claims~~
claim 1,
characterized in that
the alkaline medium furthermore contains calcium ions.
6. (Currently Amended) The use as claimed in ~~one of the preceding claims~~
claim 1,
characterized in that
the first gel employed is a gelatin-glycerol gel.
7. (Currently Amended) The use as claimed in ~~one of the preceding claims~~
claim 1,
characterized in that
the first gel furthermore contains fluoride ions.
8. (Currently Amended) The use as claimed in ~~one of the preceding claims~~
claim1,
characterized in that

the first gel has a pH of 2.0 to 6.0.

9. (Currently Amended) The use as claimed in ~~one of the preceding claims~~ claim 1,

characterized in that

the first gel further comprises at least one calcium phosphate compound.

10. (Original) The use as claimed in claim 9,

characterized in that

the first gel further comprises a calcium phosphate compound selected from fluoroapatite, monetite, brushite, amorphous calcium phosphate and hydroxylapatite.

11. (Currently Amended) The use as claimed in claim 9 or 10,

characterized in that

the first gel further comprises fluoroapatite particles, especially spherical fluoroapatite particles.

12. (Currently Amended) The use as claimed in ~~one of claims 9 to 11~~ claim 9,

characterized in that

the first gel contains 5 to 30% by weight of calcium phosphate compounds, especially of fluoroapatite.

13. (Currently Amended) The use as claimed in ~~one of claims 9 to 12~~ claim

9,

characterized in that

the first gel contains spherical particles of calcium phosphate compounds,
especially spherical particles of fluoroapatite.

14. (Currently Amended) The use as claimed in ~~one of claims 9 to 13~~ claim

9,

characterized in that

the calcium phosphate compound are used as particles having an average
size of 5 to 50 μm , in particular of 10 to 20 μm .

15. (Currently Amended) The use as claimed in ~~one of the preceding claims~~

claim 1,

characterized in that

the second gel is free of fluoride ions.

16. (Currently Amended) The use as claimed in ~~one of the preceding claims~~

claim 1,

characterized in that

the second gel is selected from gelatin-glycerol gels, polysaccharide gels or
carboxymethyl-cellulose gels.

17. (Currently Amended) The use as claimed in ~~one of the preceding claims~~

claim 1,

characterized in that

the medium containing calcium ions employed is a solution containing calcium ions or a gel containing calcium ions.

18. (Original) The use as claimed in claim 18,

characterized in that

no second gel (iiia) is employed in the case of the use of a gel containing calcium ions.

19. (Currently Amended) The use as claimed in ~~one of the preceding claims~~

claim 1,

characterized in that

the medium containing calcium ions has a pH of 6 to 8.

20. (Currently Amended) The use as claimed in ~~one of the preceding claims~~

claim 1,

characterized in that

the tooth material is defatted, slightly etched or/and rinsed before the application of the alkaline medium or/and before the application of the first gel.

21. (Currently Amended) The use as claimed in ~~one of the preceding claims~~

claim 1,

characterized in that

the tooth material is human teeth or/and tooth enamel.

22. (Currently Amended) The use as claimed in ~~one of the preceding claims~~

claim 1,

characterized in that

the components (i), (ii) and (iiia) or/and (iiib) are intended for the treatment of carious defects by remineralization.

23. (Currently Amended) The use as claimed in ~~one of the preceding claims~~

claim 1,

characterized in that

the tooth material is covered with a dentine layer or/and a protective apatite layer.

24. (Currently Amended) A composition, in particular for use as claimed in

~~one of claims 1 to 12~~ claim 1, comprising

a) an alkaline medium,

b) a first gel which comprises gelatin and phosphate ions, and

c1) a second gel which is free of phosphate ions, or/and

c2) a medium containing calcium ions.

25. (Currently Amended) A kit, in particular for use as claimed in ~~one of~~
~~claims 1 to 12~~ claim 1, comprising

- a) an alkaline medium,
- b) a first gel which comprises gelatin and phosphate ions,
- c1) a second gel which is free of phosphate ions, or/and
- c2) a medium containing calcium ions.

26. (Cancelled)

27. (Original) A process for the growth of apatite on tooth material, comprising
the steps

- (i) application of an alkaline medium,
- (ii) application of a first gel which comprises gelatin and phosphate ions, and
- (iii) application of a second gel, the first layer of gel being covered with this second gel and/or
- (iv) application of a medium containing calcium ions,

a building up of apatite on the surface of the tooth material being caused.

28. (Original) The use

- (i) of a first gel which comprises gelatin and phosphate ions, and

(iia) of a second gel which is free of phosphate ions, the first gel layer being covered with this second gel and/or

(iib) of a medium containing calcium ions,

for the production of a composition for the growth of apatite or/and dentine on tooth material, the first gel furthermore containing at least one calcium phosphate compound.